

# **The Future of Enterprise IT 2010 – 2020**

## **From Systems of Record to Systems of Engagement**

# Agenda

- **IT Today**
  - Enterprise IT: Systems of Record
  - Consumer IT: Systems of Engagement
- **The Big Disconnect**
  - Evolution or Revolution?
  - The Forcing Function
- **Enterprise Systems of Engagement**
  - What Will Change
  - Impact on IT Organizations
  - Impact on the IT Industry

# Enterprise IT: The Current State

## Systems of Record are Largely Complete

- **Transaction systems for global commerce . . .**
  - Financials, Order Processing, Inventory, HR, CRM, Supply Chain . . .
  - Mainframes, minis, client-server, PC, Internet-enabled, SaaS
- **Drove three decades of investment**
  - Data centers everywhere
  - OLTP and Business Intelligence were the key drivers
  - Network seen as a transport mechanism only
- **Y2K put the capstone on this trend**
  - Pulled forward a half decade of investment
  - Enterprise IT has had to go through a long “digestive” period
  - Focus in past decade has been on *efficiency investments*

# IT Innovation: For the Past Decade



**Enterprise IT  
On Hold**



**Consumer IT  
On Fire**

# Redefining IT for Consumers

## The Digitization of Human Culture

- **Access**
  - Infinite content, no barriers to entry, no barriers to exit
  - Communications are any-to-many-to-one
  - Social networks, blogs, Skype, Twitter
- **Broadband**
  - Pictures and video are the killer apps
  - Newspapers and magazines are toast
  - TV and radio are being reengineered even as we speak
- **Mobile**
  - PC for the emerging markets
  - iPhone sets the bar in mature markets
  - Texting, camera, location-based services

**This *is* cloud computing**  
**What does it mean for the enterprise?**

# The Big Disconnect

How can it be  
I am so **powerful** as a consumer  
And so **LAME** as an employee!!??

How disruptive do you think Consumer IT  
will be to Enterprise IT?

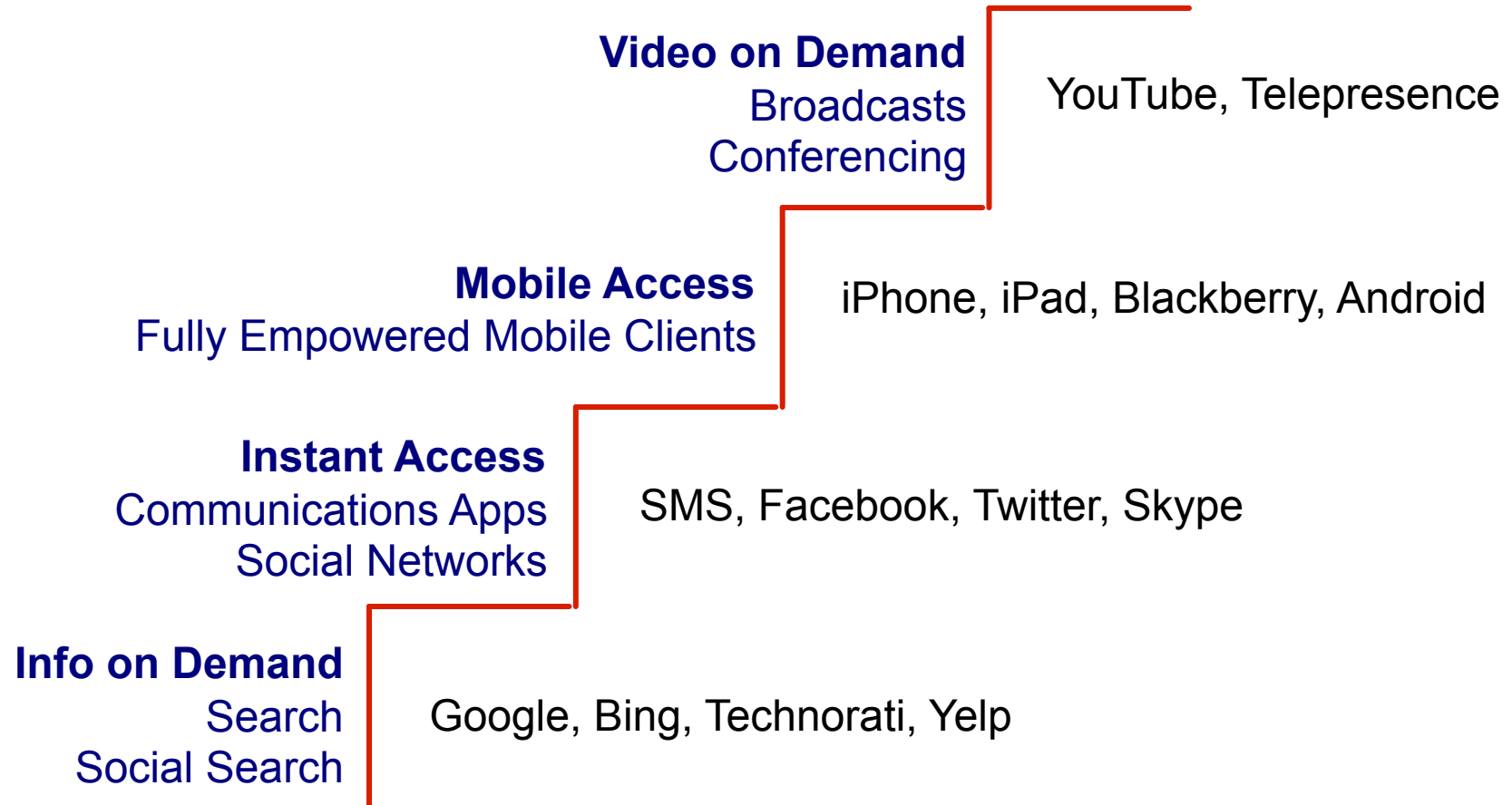
# Consumer IT: The IT Organization's View

## An Evolution in Infrastructure



# Consumer IT: The End User's View

## A Revolution in Applications



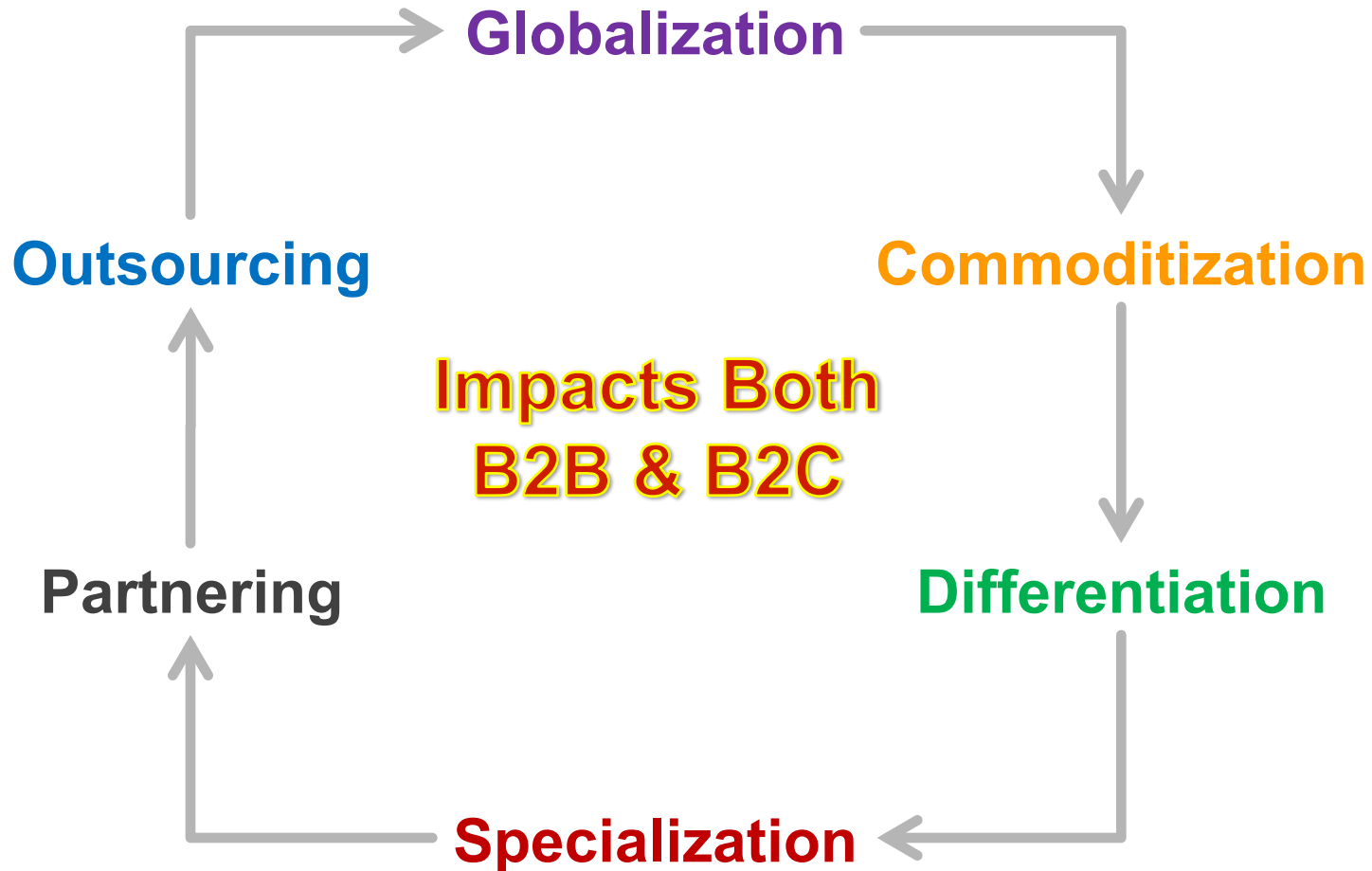


# Evolution or Revolution?

- **Evolution: The View from the IT Organization**
  - Continuation of last decade's trend lines
  - Focus is on ***Systems of Record***
  - Significant issues around mission-critical risk
  - Not fundamentally disruptive
- **Revolution: The View from End User Community**
  - New social contract for communication, collaboration, content
  - Focus is on ***Systems of Engagement***
  - Ratified by consumer IT, violated by enterprise IT
  - Radically discontinuous with current infrastructure & policies

**What will force enterprise IT to commit to systems of engagement?**

# Global Business Dynamics Will Drive the Enterprise IT Revolution



# Impact of Global Business Dynamics on B2B B2B Collaborative Networks

- **Increased demand for**
  - Collaboration
  - Relationship Management
- **Challenge: To engage with peers globally to solve problems**
  - Answers are not in Systems of Record
  - They are in other people's (and often other companies') heads
- **Burden falls on the middle of the organization**
  - Not front-line workers engaged in transactional workflows
  - Not top executives engaged in strategic issues
- **Need to invest in "IT for the middle tier"**
  - Communication and collaboration systems
  - Broad and easy access to Systems of Record on demand

# Systems of Engagement for B2B

- **The Revolution**
  - Scale collaborative capabilities through *systems of engagement*
- **Spotlight falls on the middle of the enterprise organization**
  - Not about getting more efficiency from the bottom
  - Not about getting better strategic views at the top
- **Path Forward**
  - Invest in the productivity of knowledge workers and relationship managers
- Enterprise Facebook
- Enterprise YouTube
- Enterprise Twitter
- Global presence detection
- On-demand conferencing
- Telepresence everywhere
- Mobile access to everything
- Global search
- Community content management
- With more revolutionary applications to come . . . .

# Some Early Use Cases

- **New product introductions**
  - Trouble-shooting global supply chains
  - Coordinating global product launches
- **Virtual experts**
  - Beta programs for next-generation technology products
  - Telemedicine for consulting physicians
- **Collaborative management**
  - Seeing “eye to eye” on the critical issues
  - Making decisions in real time

# Impact of Global Business Dynamics on B2C B2C Transactional Networks

- **Commoditization**
  - Massive volumes but at very low margins
  - Margin relief is key for developed economies
  - Consumer preference is the critical lever
- **From Transactions to Interactions**
  - Battle for preference at the moment of choice
  - Offline demographic promotions being disintermediated
  - Pressure to make relevant offers in real time
  - Answers are in computers or databases
  - But they are tiny needles in massive haystacks
  - Must find them and activate them before prospect moves on

## Real-Time Analytics supplant Business Intelligence

# Next-Gen IT for Coordinated Networks

- **Next-Gen Point of View**
  - Innovate through *correlations*
  - Scale through *interactions*
- **Spotlight falls on metadata, analytics, and real-time**
  - Pre-programmed transaction systems are too inflexible
  - Real-time adaptive systems are required
- **Path Forward**
  - Invest in realtime analytics, closed loop systems, and machine learning
- Collaborative filtering
- **Behavioral targeting**
- Personalized transactions
- **Location-based services**
- **Predictive analytics**
- Machine learning
- **Fraud detection**
- Multi-channel engagement
- **With more revolutionary applications to come . . . .**

# What Are Some Use Cases?

- **Up-selling self-service**
  - Offers appear in the context of a current transaction
  - No competition, ready to close
- **Next-generation promotional marketing**
  - Pay-for-results business model
  - Yield is a function of data and algorithm quality and quantity
- **Next-generation brand marketing**
  - Digital experiences to amplify brand images
  - Digital traces to garner consumer insights



# Systems of Record & Systems of Engagement

- **Systems of Record create efficiency**
  - Impossible to do global commerce without them
  - Focus on cost, quality, and contractual commitments
- **Systems of Engagement create effectiveness**
  - Address the complexities of global business relationships
  - Focus on time, innovation, and personal commitments
- **Systems of Record need Systems of Engagement**
  - Troubleshoot the exception conditions
- **Systems of Engagement need Systems of Record**
  - Access the relevant fact base
- **Correct architecture**
  - SOEs operating on top of and in touch with SORs
  - This is where the evolution in infrastructure comes in

# Implications for IT Organizations

## Systems of Record

Command & Control

Transaction-oriented

Data-centric

User learns system

Security is a key issue

## Systems of Engagement

Collaborative

Interaction-oriented

User-centric

System learns user

Privacy is a key issue

**These are big, big changes  
Where does one start?**

# For *Systems* of Engagement, Focus on *Moments* of Engagement

- **Focus on the critical few moments of engagement that determine whether you win or lose with your strategy**
  - Product Leadership: Moments of adoption
  - Customer Intimacy: Moments of trust
  - Operational Excellence: Moments of risk
- **Focus on the people in your organization that are present in these moments**
  - Product Leadership: Field Engineering, R&D
  - Customer Intimacy: Relationship managers, Customer Support
  - Operational Excellence: Supervisors, Trouble Shooters
- **Focus Systems of Engagement on meeting the needs of these people in these moments—and hurry!**

# Implications for the Industry

## The Morphing of the Stack!

# The Traditional Systems of Record Stack

**Business  
Layer**

**Business Process Consulting  
Desktop Environment  
Transaction Applications  
Business Intelligence  
Document-based Collaboration**

**Compute  
Processes**

**Web Application Infrastructure  
Systems Management Infrastructure  
Database  
Operating System**

**Compute  
Engines**

**Mainframes  
Servers  
Storage  
Data Network  
Microprocessors**

# The Morphing of the Stack

Business Layer

Business Process Consulting  
 Desktop Clients  
 Mobile Clients  
 Interaction Applications  
 Real-Time Analytics  
 Session-based Collaboration

Compute Processes

Mobile Application Infrastructure  
 Public/Private Cloud Management  
 In-Memory Caches  
 Virtual Systems Management

Compute Engines

Mainframes  
 Infrastructure Services  
 Servers  
 Storage  
 Voice/Data/Video Network  
 Microprocessors

# The New Systems of Engagement Stack

**Business  
Layer**

**Business Process Consulting**

**Mobile Clients**

**Interaction Applications**

**Real-Time Analytics**

**Session-based Collaboration**

**Compute  
Processes**

**Mobile Application Infrastructure**

**Public/Private Cloud Management**

**In-Memory Caches**

**Virtual Systems Management**

**Compute  
Engines**

**Infrastructure Services**

**Voice/Data/Video Network**

**Microprocessors**

# Two Different Trajectories

## Data-Center-Centric Stack

Business Process Consulting

Desktop Environment

Transaction Applications

Business Intelligence

Document-based Collaboration

Consolidated Suites  
for  
Optimization

Operating System

Mainframes

Servers

Storage

Data Network

Microprocessors

## Network-Centric Stack

Business Process Consulting

Mobile Clients

Interaction Applications

Real-Time Algorithms

Session-based Collaboration

Best of Breed  
for  
Differentiation

Virtual Systems Management

Infrastructure Services

Voice/Data/Video Network

Microprocessors



# Recap

- **IT Today**
  - Enterprise IT: Systems of Record **Consolidate & Optimize**
  - Consumer IT: Systems of Engagement **Invent & Invest**
- **The Big Disconnect**
  - Evolution or Revolution? **Both**
  - The Forcing Function? **The Dynamics of Global Business**
- **Enterprise Systems of Engagement**
  - What Will Change? **Invest in IT for the Middle. Analytics for the Edge**
  - Impact on IT Organizations? **Revolution & Evolution**
  - Impact on the IT Industry? **Another Generation of Leaders**

